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Somaiya Vidyavihar University & Frontier Labs to establish Centre of Excellence in Analytical Pyrolysis

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Sets a new benchmark for polymer research in India by providing students and researchers access to world-class instruments

Somaiya Vidyavihar University (SVU) has inaugurated the Centre of Excellence in Analytical Pyrolysis (CoE-AnPy), a state-of-the-art facility established in collaboration with Frontier Laboratories, Japan.

The facility is dedicated to advancing polymer science research, interdisciplinary learning, and industry engagement in India.

Somaiya Vidyavihar University and Frontier Laboratories signed a Memorandum of Understanding (MoU) to formalise this collaboration. The Centre will focus on addressing critical scientific and societal challenges related to natural and synthetic polymers, including sustainability, microplastics, and waste plastics management.

Equipped with Frontier Laboratories' cutting-edge Pyrolysis Gas Chromatography Mass Spectrometry (Py-GC/MS) instruments, including a multi-shot pyrolyser, selective sampler, cryogenic mill and microjet cryotra, the centre will enable high-throughput polymer analysis, structural characterisation, and study of degradation mechanisms with minimal sample preparation.

As part of the collaboration, researchers at Somaiya Vidyavihar University will receive hands-on training from experts from Frontier Laboratories and Shimadzu India Private Ltd. This includes a one-week programme at IIT Madras and three days of on-site instruction, ensuring students and faculty are fully equipped to leverage the advanced instrumentation for both research and teaching. The collaboration extends beyond access to state-of-the-art equipment to include deep technical expertise and knowledge transfer from Frontier Laboratories.

The CoE-AnPy will also develop technical notes, joint research publications, and industry-driven solutions, reinforcing Somaiya Vidyavihar University's mission to nurture skilled researchers, foster innovation, and foster academia-industry collaborations in advanced polymer characterisation.